FIG. 2

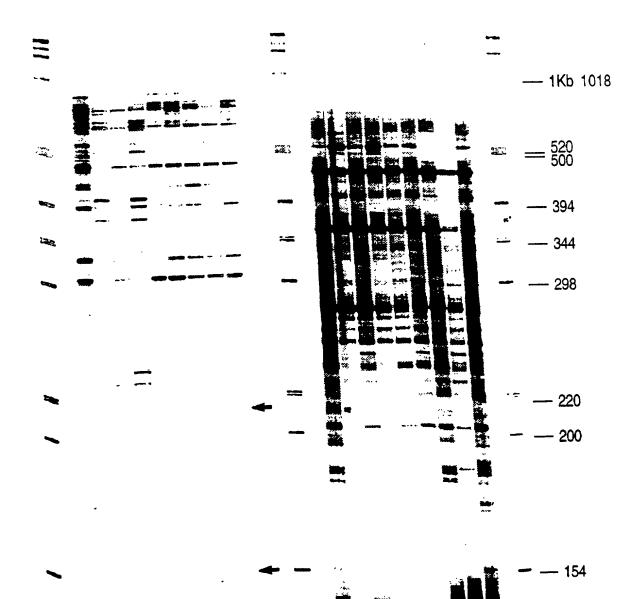
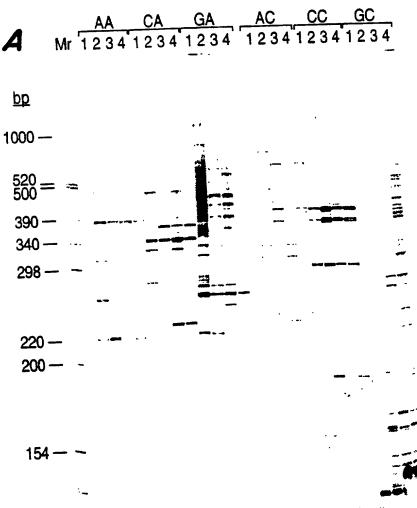


FIG. 3



- Neutrophils alone 2) Neutrophils + E.coli
 Neutrophils + Virulent y. pestis
 Neutrophils + Avirulent y. pestis Enzyme used → Bgl II

FIG. 3 (Cont.)

AG CG GG AT CT GT 12341234 1234 1234

	<u>bp</u> 520
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- Neutrophils alone 2) Neutrophils + E.coli
 Neutrophils + Virulent y. pestis
 Neutrophils + Avirulent y. pestis Enzyme used \longrightarrow Bgl ${\rm II}$

plasma membrane Ca2+ pumping ATPase (56KD subunit) vacuolar II+ pumping ATPase (16KD proteolipid subunit) human B-cell lymphoma 3-encoded protein bcl-3 mRNA human nucleolar phosphoprotein B23 (nucleophosmin) Gene Bank Search and Analysis NADH-ubiquinone oxidoreductase ASHI subunit helix-loop-helix basic phosphoprotein (GOS8) vacuolar II+ pumping ATPase (56KD subunit) LD78 β (human homolog of mouse MIP1 α human cyclin-dependent kinase inhibitor cdc2/CDC28-like protein kinase (clk1) Known Genes human ubiquitin/polyubiquitin bcl-2 related (bfl-1) mRNA LD78 receptor (HM74) MAP kinase kinase 3b Differential Display Summary of Results (1) Aviralent ++++ ++++ +++ ‡ ‡ ‡ ‡ ‡ ‡ ‡ ‡ + **Expression Patterns** Virulent +++ ‡ ‡ + ‡ + # 0 0 + # + 0 **+**+ ‡ ‡ ‡ E. coli ŧ ‡ **+**+ + ‡ ‡ + + + Control +++ ‡ ‡ ‡ ‡ # ‡ # 0 0 0 0 ZIN2 9 AT AC AC AC AC AG AT AT SAC Ş S ¥ IN23-E11 NP149-1 IN12-B12 NP104-5 NP126-3 NP124-3 NP125-2 NP139-1 NP119-1 NP131-3 NP102-3 B23-2 B14-3 Clones B20-4 7 2 13 2 = ż 0 9 7

FIG. 4

Differential Display Summary of Results (I) Known Genes

				Differential Display	- 1	Summa	
No.	Clones	NIN		Expressic	Expression Patterns	3	Gene Bank Search and Analysis
			Control	E. coli	Virulent	Avirulent	
15	NP105-1	¥¥	‡ ‡ ‡	#	+	++	human H3.3 gene exon 4
16	NP128-3	CA	0	+	‡	++++	ribosomal protein S19
11	IN20-E8	AC	+	#	‡	++	ribosomal protein S20
<u>~</u>	NP127-2	AT	+	+	#	+	poly(A) binding protein II
61	NP103-3	¥¥	‡	‡	+	++++	Spermidine/Spermine NI-acetyltransferase
20	NP132-2	ď	+	0#	+	‡	human GDP-dissociation inhibitor (LY-GD1)
21	B4-1	AC	‡	+++	+	+	bovine GTP binding regulatory protecin y-6 subunit
22	NP107-2	ΑΑ	‡ ‡ ‡	‡	+++	+++	human B4-2 protein
23	NP156-1	93	#	+	‡	‡	ras-related protein p23/Rab-7
24	B5-4	AC	#	+++	+	‡	mouse ras-related YTP1 protein/Rab-1A
25	B14-4	AC	+	+++	+	++++	human pre-B cell enhancing factor (PBEF)
56	B22-2	AC	‡	+++	+	‡	human complement decay accelerating factor
27	Bam1	AC	+	‡	++++	#	TNFa inducible protein B94

FIG. 4 (CONT'D)

Gene Bank Search and Analysis **EST Sequences** EST (GB/AC001223/IISAC001223) EST (DJB/D60083/IIUM084I105A) EST (GB/AA004905/AA004905) EST (GB/AA159075/AA159075) EST (GB/AA016979/AA016979) EST (GB/AA190718/AA190718) EST (EMB/F10736/HSC3JC022) EST (GB/L49761/HUM78188) EST (GB/U79267/HSU79267) EST (GB/L81699/HSL81699) EST (GB/N26756/N26756) EST (GB/R09487/R09487) EST (GB/R16810/R16810) EST (GB/T29287/T29287) EST (GB/T58520/T58520) Summary of Results (I) ++++ Avirulent ‡‡ +++ ‡ +++ ‡ ‡ ‡ ‡ ‡ + 0 + Differential Display **Expression Patterns** Virule +++ ‡ ++ ‡ ‡ ‡ ‡ ‡ ‡ 0 + # + ‡ E. coli ‡ ‡ ‡ ‡ ‡ + + + # + + + + + Control ‡ ‡ ‡ ‡ ‡ ++ ‡ + # # # 0 0 NIN AC AG AG AG AG S 9 AG AG AG $\mathbf{C}^{\mathbf{A}}$ ည AT ¥ Ş NP113-2 NP116-3 NP122-1 NP133-1 NP134-2 NP120-3 NP121-2 NP150-1 NP115-3 NP117-2 NP101-3 NP108-3 NP114-2 NP138-1 Clones B7-1 7 15

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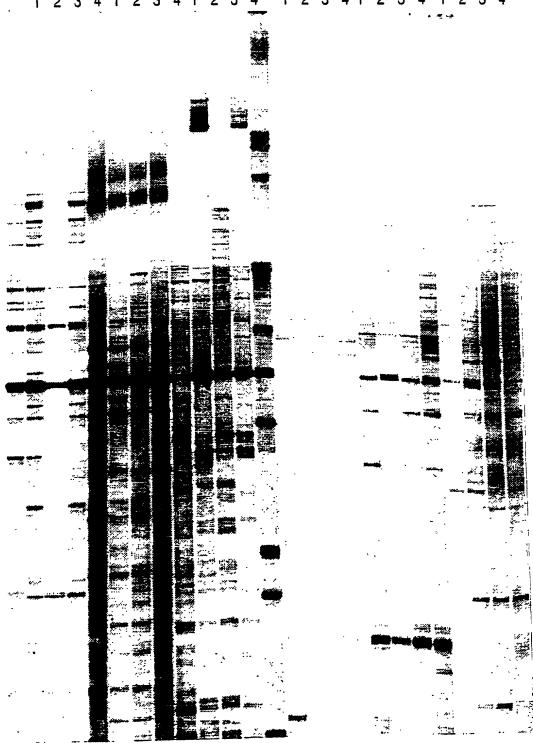
FIG. 4 (CONT'D)

Gene Bank Search and Analysis **EST Sequences** EST (GB/AA076421/AA076421) EST (GB/AA055573/AA055573) EST (GB/AA150905/AA150905) EST (GB/AA044087/AA044087) EST (EMB/Z39133/HSC11B122 EST (GB/W67981/W67981) EST (GB/N21073/N21073) EST (GB/NS0114/NS0114) EST (GB/R37008/R37008) EST (GB/N24729/N24729) EST (GB/N23012/N23012) EST (GB/R49664/R49664) EST (GB/T34605/T34605) EST (GB/H44997/H44997 Differential Display Summary of Results (1) Aviralent ‡ ++ ‡ ‡ +1 0 + **Expression Patterns** Vizk nt +++ +++ ‡ ‡ ‡ + + + + 0 + 0 + + ## +++ +++ E. coli **+**+ ‡ ‡ +++ ‡ ‡ ‡ ‡ ‡ # ++++ ‡ ‡ +++ Control +++ ‡ ‡ ‡ ‡ ‡ 0 NIN AC AC AC AC IN22-E10 IN19-E7 IN21-E9 IN10-B10 Clones B17-2 B18-2 B19-5 B21-3 B12-2 B13-4 B15-2 B10-1 B8-1 Bel 82 29 25 ż 23 91 8 6 20 7 77 24 26 27 17

FIG. 4 (CONT'D)

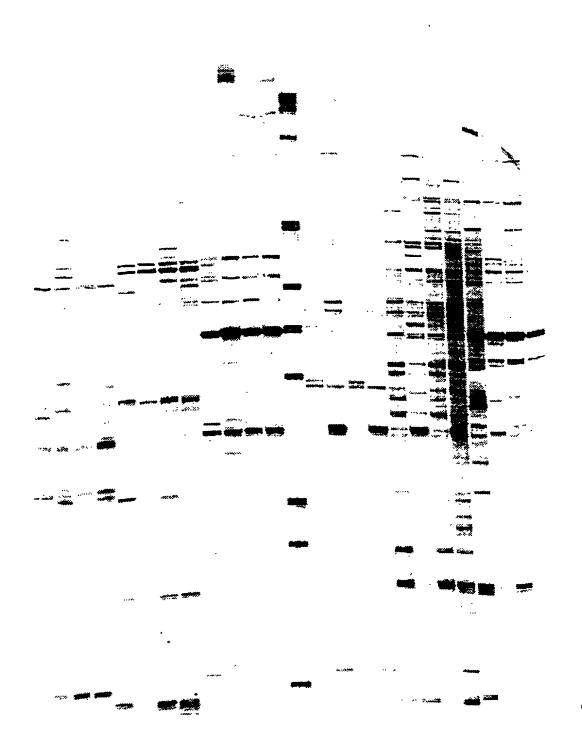
F/G. 5

1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4



F1G. 5 (Cont.)

AA GA CA AG GG CG 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4



F1G. 6

 N_1N_2 ENZYME 1 2 3 4 MIP1 α AC Eco RI LD78 Receptor AT Bgl II

- 1. Neutrophils alone
- 2. Neutrophils + E.coli
- 3. Neutrophils + Virulent *y. pestis*
- 3. Neutrophils + Avirulent *y. pestis*